

WHAT IS CLAIMED IS:

1. An absorbent structure comprising a mixture of hydrophilic fibers and superabsorbent material, the absorbent structure having a permeability as determined by an Absorbent Structure Permeability Test and a normalized retention

5 capacity as determined by a Retention Capacity Test, said absorbent structure having an intake factor of at least about 3 wherein the intake factor is defined as the absorbent structure permeability divided by the normalized retention capacity.

2. An absorbent structure as set forth in claim 1 wherein the absorbent structure has an intake factor of less than about 50.

3. An absorbent structure as set forth in claim 1 wherein the absorbent structure has a total retention capacity as determined by the Retention Capacity Test and is capable of receiving at least a first, a second and a third

5 insult of 0.9 weight percent saline solution wherein each insult corresponds to approximately thirty percent of the total retention capacity of the absorbent structure, said absorbent structure having an intake rate as determined by a FIE Test for at least one of the second and third insults of  
10 at least about four milliliters per second.

4. An absorbent structure as set forth in claim 3 wherein the absorbent structure has an intake rate as determined by a FIE Test for at least one of the second and third insults of at least about 5 milliliters per second.

5. An absorbent structure as set forth in claim 4 wherein the absorbent structure has an intake rate as determined by a FIE Test for each of the second and third insults of at least about 5 milliliters per second.

6. An absorbent structure as set forth in claim 1 wherein the hydrophilic fibers comprise cellulosic fibers.

7. An absorbent structure as set forth in claim 6 wherein the cellulosic fibers are chemically cross-linked to form intrafiber cross-links.

8. An absorbent structure as set forth in claim 1 wherein the superabsorbent material has a gel bed permeability of at least about 40 square microns as determined by a Gel Bed Permeability Test.

9. An absorbent structure as set forth in claim 1 where the superabsorbent material in the absorbent structure comprises in the range of about 30 percent to about 80 percent of the weight of the absorbent structure.

10. An absorbent structure as set forth in claim 1 wherein the normalized retention capacity of the absorbent structure as determined by the Retention Capacity Test is in the range of about 9 g/g to about 24 g/g.

11. An absorbent structure comprising at least in part a superabsorbent material, said absorbent structure having a permeability as determined by an Absorbent Structure Permeability Test and a normalized retention capacity as 5 determined by a Retention Capacity Test, said absorbent structure having an intake factor of at least about 3 and less than about 50 wherein the intake factor is defined as the absorbent structure permeability divided by the normalized retention capacity.

12. An absorbent structure as set forth in claim 11 wherein the absorbent structure has an intake factor of less than about 10.

13. An absorbent structure as set forth in claim 11 wherein the absorbent structure has an intake factor in the range of about 3 to about 5.5.

14. An absorbent structure as set forth in claim 11 wherein the absorbent structure has a total retention capacity as determined by the Retention Capacity Test and is capable of receiving at least a first, a second and a third  
5 insult of 0.9 weight percent saline solution wherein each insult corresponds to approximately thirty percent of the total retention capacity of the absorbent structure, said absorbent structure having an intake rate as determined by a FIE Test for at least one of the second and third insults of  
10 at least about four milliliters per second.

15. An absorbent structure as set forth in claim 14 wherein the absorbent structure has an intake rate as determined by a FIE Test for at least one of the second and third insults of at least about 5 milliliters per second.

16. An absorbent structure as set forth in claim 15 wherein the absorbent structure has an intake rate as determined by a FIE Test for each of the second and third insults of at least about 5 milliliters per second.

17. An absorbent structure as set forth in claim 11 wherein the superabsorbent material has a gel bed permeability of at least about 40 square microns as determined by a Gel Bed Permeability Test.

18. An absorbent structure as set forth in claim 11 where the superabsorbent material in the absorbent structure comprises in the range of about 30 percent to about 80 percent of the weight of the absorbent structure.

19. An absorbent structure as set forth in claim 11

wherein the normalized retention capacity of the absorbent structure as determined by the Retention Capacity Test is in the range of about 9 g/g to about 24 g/g.

20. An absorbent article for personal wear, said absorbent article comprising:

a liner adapted for contiguous relationship with the body of the wearer;

5 an outer cover in superposed relationship with the liner; and

an absorbent body disposed between the liner and the outer cover, the absorbent body comprising at least in part an absorbent structure having a permeability as determined by  
10 an Absorbent Structure Permeability Test and a normalized retention capacity as determined by a Retention Capacity Test, said absorbent structure having an intake factor of at least about 3 and less than about 50 wherein the intake factor is defined as the absorbent structure permeability  
15 divided by the normalized retention capacity.

21. An absorbent structure as set forth in claim 20 wherein the absorbent structure has an intake factor of less than about 10.

22. An absorbent structure as set forth in claim 20 wherein the absorbent structure has an intake factor in the range of about 3 to about 5.5.

23. An absorbent structure as set forth in claim 20 wherein the absorbent structure has a total retention capacity as determined by the Retention Capacity Test and is capable of receiving at least a first, a second and a third  
5 insult of 0.9 weight percent saline solution wherein each insult corresponds to approximately thirty percent of the total retention capacity of the absorbent structure, said

absorbent structure having an intake rate as determined by a FIE Test for at least one of the second and third insults of  
10 at least about four milliliters per second.

24. An absorbent structure as set forth in claim 23 wherein the absorbent structure has an intake rate as determined by a FIE Test for at least one of the second and third insults of at least about 5 milliliters per second.

25. An absorbent structure as set forth in claim 24 wherein the absorbent structure has an intake rate as determined by a FIE Test for each of the second and third insults of at least about 5 milliliters per second.

26. An absorbent article as set forth in claim 20 wherein the absorbent structure comprises a mixture of hydrophilic fibers and superabsorbent material.

27. An absorbent structure as set forth in claim 20 wherein the normalized retention capacity of the absorbent structure as determined by the Retention Capacity Test is in the range of about 9 g/g to about 24 g/g.

28. A method of rating the liquid intake performance of an absorbent structure, said method comprising:

conducting an Absorbent Structure Permeability Test to determine a permeability of the absorbent structure;

5 conducting a Retention Capacity Test to determine a retention capacity of the absorbent structure; and

determining an intake factor of the absorbent structure wherein the intake factor defines a rating indicative of at least one liquid intake performance characteristic of the  
10 absorbent structure, said intake factor determining step comprising dividing the absorbent structure permeability by the retention capacity.

29. A method as set forth in claim 28 wherein the retention capacity as determined by the Retention Capacity Test is a normalized retention capacity, said normalized retention capacity being defined as a total retention 5 capacity of the absorbent structure as determined by the Retention Capacity Test divided by the weight of the absorbent structure.

30. A method as set forth in claim 28 wherein the absorbent structure is capable of receiving at least a first, a second and a third insult of 0.9 weight percent saline solution wherein each insult corresponds to approximately 5 thirty percent of a total retention capacity of the absorbent structure as determined by the Retention Capacity Test, the intake factor defining a rating indicative of the intake rate of the absorbent structure as determined by a FIE Test for at least one of the second and third insults thereof.

31. A method as set forth in claim 30 wherein the intake rate of the absorbent structure as determined by the FIE test for at least one of the second and third insults is a linear function of the intake factor.